

CLAIMS:

- 5 1. A catheter handle comprising:
 a handle housing having proximal and distal ends and a generally hollow interior;
 a first moveable member having a proximal end mounted in the interior of the handle
 housing and a distal end extending outside the handle housing, the first moveable member being
 longitudinally moveable relative to the handle housing;
10 a second moveable member mounted in the interior of the handle housing and
 longitudinally moveable relative to the handle housing; and
 a rotatable member mounted on the handle housing, whereby rotation of the rotatable
 member causes longitudinal movement of the second moveable member.
- 15 2. The catheter handle of claim 1, wherein the first moveable member and second
 moveable member are capable of simultaneously moving proximally relative to the handle
 housing.
- 20 3. The catheter handle of claim 1, wherein the second moveable member is not
 rotatably moveable relative to the handle housing.
- 25 4. The catheter handle of claim 1, further comprising a thumb control mounted at
 or near the distal end of the first moveable member.
- 30 5. The catheter handle of claim 1, wherein the rotatable member has a threaded inner
 surface that mates with a threaded surface of the second moveable member.
- 35 6. The catheter handle of claim 5, further comprising a core mounted in the interior
 of the handle housing, the core having a longitudinal slot therethrough in which the second
 moveable member is slidably mounted.
- 40 7. The catheter handle of claim 1, further comprising a core mounted in the interior
 of the handle housing, the core having a longitudinal slot therethrough in which the second
 moveable member is slidably mounted.

8. The catheter handle of claim 7, wherein the core has a lumen extending through at least a portion of the length of the core.

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9. The catheter of claim 7, wherein the first moveable member is generally tubular and is mounted in surrounding relation to a portion of the core.

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10. The catheter handle of claim 1, wherein the handle housing is generally tubular and the rotatable member extends around the entire circumference of the handle housing.

- 15 11. A catheter handle comprising:
a handle housing having proximal and distal ends and a generally hollow interior;
a core mounted in the interior of the handle housing, the core having a longitudinal slot therethrough;
a first moveable member having a proximal end mounted in the interior of the handle housing and a distal end extending outside the handle housing, the first moveable member being longitudinally moveable relative to the handle housing;
a second moveable member mounted in the longitudinal slot of the core and longitudinally moveable relative to the core and handle housing, the second moveable member having a threaded surface; and
a rotatable member mounted on the handle housing and having a threaded inner surface that mates with the threaded surface of the second moveable member, whereby rotation of the rotatable member causes longitudinal movement of the second moveable member;
wherein the first moveable member and second moveable member are capable of simultaneously moving proximally relative to the handle housing.

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- 30 12. A catheter comprising:
an elongated, flexible catheter body having proximal and distal ends and a lumen extending therethrough;
an intermediate section at the distal end of the catheter body having proximal and distal ends and first and second off-axis lumens extending therethrough;
a handle according to claim 1 mounted at the proximal end of the catheter body, whereby the catheter body is attached to the handle housing;

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5 a first puller wire extending through the catheter body and first off-axis lumen of the intermediate section, having a proximal end anchored to the first moveable member of the handle, and having a distal end anchored at or near the distal end of the catheter; and

a second puller wire extending through the catheter body and second off-axis lumen of the intermediate section, having a proximal end anchored to the second moveable member of the handle, and having a distal end anchored at or near the distal end of the catheter.

10 13. The catheter of claim 12, wherein the distal end of the first puller wire is anchored to the intermediate section.

15 14. The catheter of claim 12, further comprising a generally circular mapping assembly mounted on distal end of the intermediate section and having proximal and distal ends and an off-axis lumen extending therethrough, wherein the distal end of the second puller wire extends through the off-axis lumen of the mapping assembly and is anchored at or near the distal end of the mapping assembly.

20 15. The catheter of claim 12, wherein the first moveable member and second moveable member are capable of simultaneously moving proximally relative to the handle housing.

25 16. The catheter of claim 12, wherein the rotatable member has a threaded inner surface that mates with a threaded surface of the second moveable member.

17. The catheter of claim 16, wherein the catheter handle further comprises a core mounted in the interior of the handle housing, the core having a longitudinal slot therethrough in which the second moveable member is slidably mounted.

30 18. The catheter of claim 12, wherein the catheter handle further comprises a core mounted in the interior of the handle housing, the core having a longitudinal slot therethrough in which the second moveable member is slidably mounted.

35 19. The catheter of claim 18, wherein the first moveable member is generally tubular and is mounted in surrounding relation to a portion of the core.